

(FILE 'USPAT' ENTERED AT 10:04:04 ON 17 MAY 1999)

L1 250 S MYCOTOXIN?
L2 1537 S YEAST CELL
L3 1 S L1 AND L2
L4 26597 S YEAST
L5 11333 S CELL WALL?
L6 3616 S L4 AND L5
L7 12 S L1 AND L6
L8 227414 S BIND?
L9 9 S L7 AND L8
L10 68395 S CLAY?
L11 1 S L9 AND L10
L12 8 S L9 NOT L11
L13 7 S L1 (4

+ glycan

+ ethanol / alcohol

+ feed / food

2015/5/6
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1. 5,192,547, Mar. 9, 1993, Animal feed containing selected montmorillonite **clay** as additive and method for selecting the **clay**; Dennis R. Taylor, 424/438; 426/2, 74 [IMAGE AVAILABLE]

US PAT NO: 5,192,547 [IMAGE AVAILABLE]

L18: 1 of 3

ABSTRACT:

A correlation is established between aflatoxin B1 binding on raw montmorillonite **clays** and the ratio of their surface acidities divided by their porosities for surface acid sites whose pKa values fall in the range 5.0-6.8 (i.e. weakly acidic) and porosities for pores whose diameters fall in the region 50-600 A. This information provides a method for preselecting **clay** additives for animal feeds which have enhanced toxin binding capacity.

2. 5,178,832, Jan. 12, 1993, Selective immobilization and detection of mycotoxins in solution; Timothy D. Phillips, et al., 422/60, 69, 88; 435/29; 436/128, 174, 178 [IMAGE AVAILABLE]

US PAT NO: 5,178,832 [IMAGE AVAILABLE]

L18: 2 of 3

ABSTRACT:

It has been discovered that certain minerals, particularly various naturally occurring forms of aluminum oxide, will preferentially bind selective **mycotoxins** from a mixture of mycotoxins. These adsorbants, when used in various combinations and/or in conjunction with the adsorbants of the prior art, permit the construction of detector tubes which can resolve mycotoxins in solution and provide a semi-quantitative fluorescent determination of their concentration in feed or foodstuff samples. The detector tubes comprise transparent tubes packed with isolated layers of selected minerals. A solvent extract from a sample potentially contaminated with mycotoxins is passed through the column. As the mycotoxin mixture passes through the detector tube and is contacted by the various mineral adsorbants, selected mycotoxins are immobilized on a specific mineral while other mycotoxins and co-extracted organic compounds pass through that layer to be immobilized on subsequent downstream mineral layers. The presence of mycotoxins is determined by examining the developed detector tube under a long wave uv light source.

✓ 3. 5,165,946, Nov. 24, 1992, Animal feed additive and method for inactivating mycotoxins present in animal feeds; Dennis R. Taylor, et al., 426/74, 96, 271, 302, 623, 630, 807 [IMAGE AVAILABLE]

US PAT NO: 5,165,946 [IMAGE AVAILABLE]

L18: 3 of 3

ABSTRACT:

A dry solid animal feed composition in which biodegradable feed is contaminated with a mycotoxin and is admixed with a mycotoxin inactivating agent comprising particles of a phyllosilicate mineral capable of inactivating mycotoxins, said particles being coated with a sequestering agent in an amount sufficient to enhance the mycotoxin inactivating capacity of said phyllosilicate.